International Application No.	
International Filing Date March 31, 2004	
Name of receiving Office and "PCT International Application"	

For receiving Office use only

REQUEST The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty. Applicant's or agent's file reference (if desired) (12 characters maximum) 99P05446 Box No. I TITLE OF INVENTION RF MODULE Box No. II APPLICANT This person is also inventor Telephone No. Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this 047-378-9093 Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) Facsimile No. 047-378-9321 TDK CORPORATION 13-1, Nihonbashi 1-chome, Teleprinter No. Chuo-ku, Tokyo 103-8272 JAPAN Applicant's registration No. with the Office State (that is, country) of residence: State (that is, country) of nationality: **JAPAN JAPAN** the States indicated in the This person is applicant all designated all designated States except the United States the United States of America of America only Supplemental Box for the purposes of: Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S) Name and address: (Family name followed by given name; for a legal entity, full official designation. This person is: The address must include postal code and name of country. The country of the address indicated in this applicant only Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) applicant and inventor FUKUNAGA Tatsyua inventor only (If this check-box is marked, do not fill in below.) c/o TDK CORPORATION 13-1, Nihonbashi 1-chome, Applicant's registration No. with the Office Chuo-ku, Tokyo 103-8272 JAPAN State (that is, country) of nationality: State (that is, country) of residence: **JAPAN JAPAN** all designated This person is applicant all designated States except the United States the States indicated in for the purposes of: the United States of America of America only the Supplemental Box States Further applicants and/or (further) inventors are indicated on a continuation sheet. Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE The person identified below is hereby/has been appointed to act on behalf agent common of the applicant(s) before the competent International Authorities as: representative (Family name followed by given name; for a legal entity, full official designation. Name and address: Telephone No. The address must include postal code and name of country.) 03-3225-0981 Facsimile No. MITAZAKI Taiji 03-3225-0980 2F, Oodai Building, Teleprinter No. 9-5, Shinjuku 1-chome, Shinjuku-ku, Tokyo 160-0022 JAPAN Agent's registration No. with the Office 100109656 Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the

space above is used instead to indicate a special address to which correspondence should be sent.

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INV	VENTOR(S)				
If none of the following sub-boxes is used, this sheet should not be included in the request.					
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) IKEDA Masaaki c/o TDK CORPORATION 13-1, Nihonbashi 1-chome, Chuo-ku, Tokyo 103-8272 JAPAN					
State (that is, country) of nationality: State (that is, country) of results State (that is, country) of results State (that is, country) State (that	sidence: JAPAN				
This person is applicant all designated all designated States except the U	United States the States indicated in the Supplemental Box				
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) HATANAKA Kiyoshi c/o TDK CORPORATION 13-1, Nihonbashi 1-chome, Chuo-ku, Tokyo 103-8272 JAPAN					
State (that is, country) of nationality: State (that is, country) of res JAPAN	sidence: JAPAN				
	United States the States indicated in the Supplemental Box				
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) applicant only applicant and inventor inventor only (If this check-bo is marked, do not fill in below.)					
	Applicant's registration No. with the Office				
State (that is, country) of nationality: State (that is, country) of res	sidence:				
	United States the States indicated in the Supplemental Box				
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)	This person is: applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.) Applicant's registration No. with the Office				
State (that is, country) of nationality: State (that is, country) of res	idence:				
	United States the States indicated in the Supplemental Box				
Further applicants and/or (further) inventors are indicated on another continuation sheet.					

If the Supplemental Box is not used, this sheet should not be included in the request.

- If, in any of the Boxes, except Boxes Nos. VIII(i) to (v) for which a special continuation box is provided, the space is insufficient to furnish all the information: in such case, write "Continuation of Box No..." (indicate the number of the Box) and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient, in particular:
- (i) if more than two persons are to be indicated as applicants and/or inventors and no "continuation sheet" is available: in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below;
- (ii) if, in Box No. II or in any of the sub-boxes of Box No. III, the indication "the States indicated in the Supplemental Box" is checked: in such case, write "Continuation of Box No. II" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is applicant;
- (iii) if, in Box No. II or in any of the sub-boxes of Box No. III, the inventor or the inventor/applicant is not inventor for the purposes of all designated States or for the purposes of the United States of America: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is inventor;
- (iv) if, in addition to the agent(s) indicated in Box No. IV, there are further agents: in such case, write "Continuation of Box No. IV" and indicate for each further agent the same type of information as required in Box No. IV;
- (v) if, in Box No. VI, there are more than three earlier applications whose priority is claimed in such case, write "Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box No. VI.
- 2. If the applicant intends to make an indication of the wish that the international application be treated, in certain designated States, as an application for a patent of addition, certificate of addition, inventor's certificate of addition or utility certificate of addition: in such a case, write the name or two-letter code of each designated State concerned and the indication "patent of addition," "certificate of addition," "inventor's certificate of addition," the number of the parent application or parent patent or other parent grant and the date of grant of the parent application (Rules 4.11(a)(iii) and 49bis.1(a) or (b)).
- 3. If the applicant intends to make an indication of the wish that the international application be treated, in the United States of America, as a continuation or continuation-in-part of an earlier application: in such a case, write "United States of America" or "US" and the indication "continuation" or "continuation-in-part" and the number and the filing date of the parent application (Rules 4.11(a)(iv) and 49bis.1(d)).

FUJISHIMA Youichiro 2F, Oodai Building, 9-5, Shinjuku 1-chome, Shinjuku-ku Tokyo 160-0022 JAPAN

Telephone No. 03-3225-098 Facsimile No. 03-3225-0980 Agent's registration No. with the Office 100098785

Box No. V DESIGNATIONS						
			l Contracting States bound le, for the grant of both region	by the PCT on the international and national patents.		
However,						
☐ DE Germany is not d	lesignated for any kind of n	ational protection				
☐ KR Republic of Kore	a is not designated for any	kind of national protection				
RU Russian Federation	on is not designated for any	kind of national protection		•		
(The check-boxes above may be used to exclude (irrevocably) the designations concerned in order to avoid the ceasing of the effect, under the national law, of an earlier national application from which priority is claimed. See the Notes to Box No. V as to the consequences of such national law provisions in these and certain other States.)						
Box No. VI PRIORIT	TY CLAIM					
The priority of the following	g earlier application(s) is here	by claimed:				
Filing date	Number	Where earlier application is:				
of earlier application (day/month/year)	of earlier application	national application: country or Member of WTO	regional application:* regional Office	. international application: receiving Office		
item (1) 24.06.03	2003-179368	JAPAN				
item (2)			2			
item (3)						
Further priority claims are indicated in the Supplemental Box.						
The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of this international application is the receiving Office) identified above as:						
all items item (1) item (2) item (3) other, see Supplemental Box						
*Where the earlier application is an ARIPO application, indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed (Rule 4.10(b)(ii)):						
Box No. VII INTERNA	ATIONAL SEARCHING	AUTHORITY				
Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used): ISA /JP						
Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority):						
Date (day/month/year)	Number		Country (or regional Office)	·		
Box No. VIII DECLARATIONS						
The following declarations are contained in Boxes Nos. VIII (i) to (v) (mark the applicable check-boxes below and indicate in the right column the number of each type of declaration): Number of declarations						
Box No. VIII (i)	Declaration as to the iden	Declaration as to the identify of the inventor :				
Box No. VIII (ii)		Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent :				
Box No. VIII (iii)	Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application :					
Box No. VIII (iv) Declaration of inventorship (only for the purposes of the designation of the United States of America):						
Box No. VIII (v)	Declaration as to non-pre	Declaration as to non-prejudicial disclosures or exceptions to lack of novelty:				

Box No. IX CHECK LIST; LANGUAGE OF	FILING	•			
This international application contains: (a) on paper, the following number of	This international application is accompanied by the fol item(s) (mark the applicable check-boxes below and indicipated by the following the property of each item).				
(a) on paper, the following number of sheets: request (including declaration sheets) : 5 description (excluding sequence listings and/or tables related thereto) : 15 claims : 2 abstract : 1 drawings : 9 Sub-total number of sheets : 32 sequence listing : tables related thereto : (for both, actual number of sheets if filed on paper, whether or not also filed in electronic form; see (c) below) : Total number of sheets : 32 (b) only in electronic form (Section 801(a)(i)) (i) sequence listing (ii) tables related thereto (c) also in electronic form (Section 801(a)(ii)) (i) sequence listing (ii) tables related thereto Type and number of carriers (diskette, CD-ROM, CD-R or other) on which are contained the sequence listing tables related thereto (additional copies to be indicated under item 9(ii) and/or 10(ii), in right column)	ttem(s) (mark the applicable check-boxes below and indiving toolumn the number of each item): 1.	: 1 :: 1 :: 1 :: 1 :: 1 :: 1 :: 1 :: 1			
Figure of the drawings which	Language of filing of the				
should accompany the abstract: 1	international application: JAPANESE				
Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request). MITAZAKI Taiji FUJISHIMA Youichiro					
Date of actual receipt of the purported	For receiving Office use only				
international application:		2. Drawings:			
 Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application: 		received:			
4. Date of timely receipt of the required corrections under PCT Article 11(2):		not received:			
5. International Searching Authority (if two or more are competent): ISA /JP	6. Transmittal of search copy delayed until search fee is paid				
Data of receipt of all	For International Bureau use only				
Date of receipt of the record copy by the International Bureau:					